

## DEVICE FOR HAIR HIGHLIGHTING TREATMENT

The present invention relates to a device for hair highlighting treatment.

10 In the hairdressing field, highlighting, or colour tapering, refers to hair treatment which is aimed at imitating slight colour lightening which can be natural or which generally occurs in the summer. The term "mèches" or streaks, on the other hand, is a stronger colour  
15 lightening which gives a more marked partial colouring.

To obtain a highlighting effect, permanent or semi-permanent dyes, or bleaches are applied to the hair to be treated.

Permanent dyes are generally produced in the form of  
20 creams containing substances which, following oxidation, are transformed into dyes. These preparations are not therefore real colours but colour precursors.

These dyes are permanent as they become permanently bound to the keratin of the hair. The reaction takes  
25 place with an oxidizer, which is normally hydrogen perox-

ide, used at low volumes of 10-20 to volumes of 30-40 if the colour must be lightened.

Semi-permanent dyes are those which are eliminated after 4-6 shampoo washings. They already contain colour-  
5 ing substances. They are used for highlighting the natural colour, for covering white hair strands, for those who frequently dye their hair. The colour is only deposited on the surface. This form of colouring is less aggressive.

10 As far as bleaches are concerned, at one time only high concentration hydrogen peroxide was used. Today bleaching is obtained by the dissolution and destruction of the melanin pigment in the hair. This operation generally weakens the hair structure.

15 According to the known art, the application of dyes or bleaches comprises a series of manual phases.

After taking a lock of hair to be treated, the hairdresser generally rests it on a piece of tinfoil: he or she then spreads the dye or bleach onto the lock of hair,  
20 according to necessity. A free edge of the tinfoil is then closed over the lock of hair. After a certain period of time for the colouring or bleaching, the tinfoil is removed and the hair is ready.

One of the drawbacks of this method is that only  
25 manual operations are envisaged.

Another problem is linked to the fact that it is not possible to control the advance of the colouring or bleaching process of the lock of hair, as this is enclosed inside the tinfoil.

5       An objective of the present invention is to overcome the disadvantages mentioned above and in particular to provide a device for hair highlighting treatment which speeds up the application operations of the treatment.

Another objective of the present invention is to  
10       provide a device for hair highlighting treatment which allows the advance of the colouring or bleaching process applied, to be observed.

A further objective of the present invention is to provide a device for hair highlighting treatment which is  
15       particularly reliable, simple, functional and at relatively low costs.

These and other objectives according to the present invention are achieved by means of a device for hair highlighting treatment as illustrated in claim 1.

20       Further characteristics of a device for hair highlighting treatment are object of the dependent claims.

The characteristics and advantages of a device for hair highlighting treatment according to the present invention will appear more evident from the following illustrative but non-limiting description, referring to the  
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enclosed schematic drawings in which:

Figure 1 is a plan view from above of a device for hair highlighting treatment according to the present invention, comprising a small board on which a strip made  
5 of transparent material is extended;

Figure 2 shows a raised side view of the treatment device of figure 1;

Figure 3 is a raised side view illustrating the device with a strip, represented in figure 1, the device  
10 resting on a person's hair, and on which there is already another strip made of transparent material of the same type.

With reference to figures 1 and 2, these show a device for the highlighting treatment of hair 12, indicated  
15 as a whole with 10.

The device 10 comprises a substantially rectangular-shaped small board 14, and a strip 16, generally made of a transparent material, with a form memory which, when resting, keeps it in a spirally wound position.

20 At one end of the strip 16, there is a hook 18, which is removably fixed to an end of the board 14.

Figure 1 shows a lath 20 applied to this end of the strip 16, said hook 18, which is "C"-shaped, being fixed to the lath 20, which can be coupled with an edge 21 of  
25 the board 14.

Blocking devices 22, suitable for fixing the board 14 in an extended position, are situated above the board 14, close to the opposite end to where the end of the strip 16 is hooked.

5        Figure 2 shows these blocking devices 22 which comprise a lever 24 whose fulcrum is in 26, oscillating in relation to a main axis of the board 14. An end of the lever 24 is hook-shaped 28, there also being an elastic element 30, such as a tape spring, which when resting  
10        pushes the hook 28 against a surface of the board 14.

Above the board 14, there can also be an extension 32, substantially orthogonal to the board 14 itself, which is positioned below the hook 28, between said hook 28 and said extension 32, there being a space for housing  
15        a part of the spirally wound strip 16.

In addition, in order to facilitate the unwinding of the strip 16 wound and fixed to an end, a small rod 34 can be placed inside the spirally wound strip, optionally having terminal elements 36 at the ends, suitable for  
20        preventing the rod 34 from slipping out of the spirally wound strip 16.

The functioning of the hair 12 highlighting device  
10        according to the invention is evident from the above description and with reference to the figures, and is  
25        briefly explained hereunder.

The hook 18 of the strip 16 is hooked to the edge 21 of the board 14, so that the spirally wound strip 16 is situated on an upper edge of the board 14.

After lifting a lock of the client's hair 12, the  
5 hairdresser rests the board 14 at the base of the raised lock of hair, and the end of the edge 21 is brought close to the client's head, as shown in figure 3.

The rod 34 is moved in the direction of the hook 28 of the lever 24, keeping it to the side for the terminal  
10 elements 36: the strip 16 is then progressively extended on the board 14, until said strip 16, still partially spirally wound, is brought against the extension 32 which acts as a run end.

To do this, the hook 28 of the lever 24, must be  
15 first raised, by impeding the elastic element 30, which is then released so as to block part of the strip 16, still spirally wound beneath the hook 28 itself.

At this point, the hairdresser spreads the lock of hair previously lifted, onto the extended strip 16, and  
20 applies a dye or bleach on said lock of hair. Alternatively or additionally, the dye or bleach can also be put onto the extended strip 16 before resting the lock of hair 12 thereon.

The hook 28 is then raised so that the strip 16 is  
25 again spirally wound, entrapping the hair with the dye or

bleach between spirals.

The strip 16 thus wound is then unhooked from the board 14, by releasing the hook 18, and remains on the client's hair 12.

5 Further strips 16 are then applied for other locks of hair to be treated.

As the strip 16 is transparent, the hairdresser can also observe the dying or bleaching process and evaluate for example, the most suitable moment for removing the  
10 series of strips 16 from the client's head 12.

The strips 16 are removed with or without the help of the board 14, in the former case, the board 14 naturally being used with analogous operations and contrary to those described for the application of the strips 16.

15 The boards 14, and consequently also the strips 16, can have various lengths depending on the length of the hair 12 to be treated, thus forming a complete treatment kit.

Furthermore there can be various widths of the  
20 strips 16, depending on the width of the hair 12 to be treated at the same moment.

It should be pointed out that the strip 16 with a form memory, which, when resting, is spirally rewound, is well-known in the art, for example in the case of a photographic film.  
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The characteristics of the device for hair highlighting treatment, object of the present invention, are evident from the above description, as are the relative advantages, among which the following can be mentioned:

- 5 - simple and reliable use;
- considerable increase in the application speed of the highlighting treatment;
- control of the advance of the dyeing or bleaching process;
- 10 - limited possibility of staining on the part of the client or hairdresser;
- greater application precision in a certain area, allowing intervention after a period of time, following the first application, on the initial part of
- 15 the hair which has grown in the meantime.

Finally, numerous modifications and variants can be applied to the device for hair highlighting treatment, all included in the scope of the invention; furthermore, all the details can be substituted with technically

20 equivalent elements. In practice, the materials used, as also the dimensions, can vary according to technical demands.